

College of San Mateo
Official Course Outline

1. **COURSE ID:** FITN 226 **TITLE:** Plyometric Conditioning
Units: 0.5 -1.0 units **Hours/Semester:** 24.0-54.0 Lab hours
Method of Grading: Grade Option (Letter Grade or P/NP)
Prerequisite: Completion of or concurrent enrollment in a varsity course or equivalent fitness level as documented by a physical conducted by a licensed medical physician and a thorough orthopedic examination.
2. **COURSE DESIGNATION:**
Degree Credit
Transfer credit: CSU; UC
AA/AS Degree Requirements:
 CSM - GENERAL EDUCATION REQUIREMENTS: E4: Physical Education
CSU GE:
 CSU GE Area E: LIFELONG LEARNING AND SELF-DEVELOPMENT: E2
3. **COURSE DESCRIPTIONS:**
Catalog Description:
 Course designed to promote physiological development of strength, speed and power through a series of leaping, bounding and hopping exercises to effectively improve coordination and agility, and fast-twitch muscle fiber conditioning.
4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**
 Upon successful completion of this course, a student will meet the following outcomes:
 1. Explain the differences between plyometric training, aerobic training and anaerobic training .
 2. Improve one or more: body composition, range of motion, overall body weight, resting heart rate, strength and endurance, and aerobic capacity.
5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
 Upon successful completion of this course, a student will be able to:
 1. Engage in a safe, effective plyometric program.
 2. Explain the differences between plyometric training, aerobic training and anaerobic training.
 3. Improve/maintain overall fitness level.
6. **COURSE CONTENT:**
Lab Content:
 1. Understanding safety protocol
 2. Engaging in flexibility exercises, warm-up
 3. Flexibility: lower limbs, core, upper limbs
 4. Warm-up: moderate aerobic activities
 5. Fast twitch core training (response time)
 6. Emphasis on core development
 - i. Gastrocnemius, hamstrings, quadriceps, gluteus maximus
 - ii. Latissimus dorsi, trapezius
 - iii. Abdominals
 7. Eccentric drop and hold jumps
 8. Eccentric to concentric phase (muscular response)
 9. Pre-season/early conditioning phase (low range)
 10. Split squats
 11. Jump squats
 12. Straight leg jumps
 13. Main power conditioning phase (medium range)
 14. Single leg variants
 15. Development of optimum force return
 16. Pre-competition phase (high range)
 17. Quality, high intensity activity
 18. Sport specific activities
 19. Competition phase (maintenance)

A. High quality drills, low in number

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Lab
- C. Activity
- D. Critique
- E. Directed Study
- F. Discussion
- G. Individualized Instruction
- H. Observation and Demonstration

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

1. Article and presentation on the widespread use of plyometric training in professional and collegiate sports

Reading Assignments:

1. Written report on the difference between plyometric training and resistance training.
2. Written assignment on the contraindications of plyometric training and strategies to avoid them.
3. Journal: Students will maintain a weekly journal detailing the physiological benefits gained through plyometric training.
 - a. Week 1: Baseline measures
 - i. Core strength – Abdominal crunches measured per minute (timed test)
 - ii. Vertical leap – Using Vertec jump measurement device
 - iii. 5 dot drill – Measuring footspeed
 - iv. Side-side ankle hops – Measuring agility/footspeed
 - v. Standing long jump – Measuring explosiveness in quadriceps
 - b. Week 2-7: Prescription provided, detailed and documented in journal
 - c. Week 8: Mid-term
 - d. Week 9: Re-establish prescription based on mid-term results
 - e. Week 10-16: Continuation of journal entry
 - f. Week 17: Final measurements taken

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Class Performance
- C. Class Work
- D. Exams/Tests
- E. Final Class Performance
- F. Lab Activities
- G. Portfolios
- H. Quizzes
- I. Written examination
- J. • Progressive skill development • Assessment of pre and post physiological adaptations • Written exam on principles of exercise with emphasis on plyometric activity • Evaluation of journal

10. REPRESENTATIVE TEXT(S):

Other:

- A. Instructor generated handouts
- B. Various DVD's

Origination Date: September 2015
Curriculum Committee Approval Date: February 2017
Effective Term: Fall 2017
Course Originator: Andreas Wolf

